

Prairies and Savannas



Pre-European Conditions

The Effigy Moundbuilders knew a similar, but different, more complete, landscape than we know. They not only knew the backwater swamps, rich rivers, and dense forests, but also colorful tallgrass prairies and park-like oak savannas.

For thousands of years, tallgrass prairie and oak savanna were dominant parts of the diverse mosaic of habitats in northeastern Iowa. Prairie grasses and brilliant wildflowers covered much of the land that is now occupied by forests, especially bluff tops and river terraces. Fire-tolerant oaks dotted some of the grasslands, forming a natural community called oak savanna. And forests? Well, they were limited to areas that wildfires could not reach, like cool, moist valleys and river bottoms.

At first glance, grasslands might look like a bunch of dried grass, like any old pasture. In fact, settlers erringly took the absence of trees as proof that prairies were barren infertile plains. But a closer look reveals a rich, intricate system of plants, animals, and environmental forces.

Imagine...Bizarre insects of all shapes and sizes hovering around bright flowers. Burly bison rolling on the ground in a cloud of dust. A flashy lizard racing after an insect meal. Orange fire engulfing the landscape thereby returning nutrients to the soil and setting back woody growth. Tallgrass prairies are all of these things and more.

How Do We Know Prairies Were Here?

Surveyors and explorers canvassed the country taking notes and keeping precise records of wild animals, plant life, sources of water, and other important natural features. We can look back at their journals and maps to "see" what the first European observers saw. A 1890 river map (see reverse side) is so detailed that it documents individual trees within the park landscape. A close-up of the North Unit of Effigy Mounds National

Monument reveals the makings of an oak savanna - prairie grasses and an oak grove. It even depicts the stumps of three recently cut oak trees.

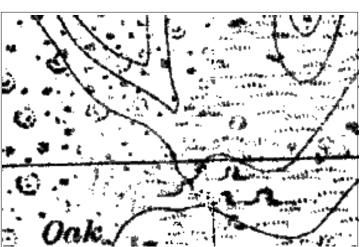
Historical accounts paint pictures of the past landscape, too.

"The prairies burning form some of the most beautiful scenes that are to be witnessed in this country, and also some of the most sublime. Every acre of these vast prairies (being covered for hundreds and hundreds of miles, with a crop of grass, which dies and dries in the fall) burns over during

the fall or early in the spring, leaving the ground of a black and doleful color. ... These scenes at night become indescribably beautiful, when their flames are seen at many miles distance, creeping over the sides and tops of the bluffs, appearing to be sparkling and brilliant chains of liquid fire (the hills being lost to the view), hanging suspended in graceful festoons from the sky."

- George Catlin, circa 1890

There are also visible signs today that areas at the Monument were not always forested. The small size of the trees betrays their short history around the mounds. Most are no older than 150 years. Some logging long ago may account for their relative youth, but many are just newcomers, having invaded grasslands no more than 200 years



ago. Another clue is a carpet of grasses and sunloving plants on the forest floor. These places are called prairie remnants; they are places where the original plants are still barely hanging on. Without help, they will slowly die in the shade of the invading trees.

Natural or Man-Made?

Were prairie fires ignited naturally by lightning or did American Indians maintain them by setting fires to improve hunting? Both. Prairie pollen was floating around about 6,500 years ago. According to pollen studies from northeast Iowa caves, prairies made their way north as the climate warmed after the last ice age. As glaciers retreated, tundra turned to boreal forests that eventually gave way to hardwood forests and grasslands. As time went on and native people put down roots on newly uncovered land, they began the practice of setting prairie fires. This encouraged new plant growth, which drew big game like bison and elk to their lands.



Today's Prairies



Today, very little of our grasslands remain. Fire suppression and some farming practices have made prairies and oak savannas rare. As European settlers changed the landscape for survival, they inadvertently started a chain of events that would almost eliminate prairies.

People suppressed wildfires, letting trees grow up in places where only drought-tolerant grasses and wildflowers could grow before. The rich prairie soil made excellent corn fields and was quickly converted to some of the most fertile agricultural fields in the world. Prairies that were too steep to plow made good pastures.

Once covering almost 33% of Wisconsin and 85% of Iowa, less than 1% of the original prairie remains. Tallgrass prairie is considered one of the most endangered ecosystems in North America.

Restoration of these natural ecosystems in underway at Effigy Mounds National Monument. You may notice downed trees or leftover stumps along the trail, or if you are here in the spring, areas of black ash where a prescribed burn has run its course. These are all attempts to bring back the grassland communities of a landscape upon which prehistoric and historic people survived and prospered.

About the Monument

Effigy Mounds National Monument, located along the Mississippi River in extreme northeast Iowa, was established in 1949 in order to preserve prehistoric American Indian burial and ceremonial mounds. The Monument covers 2,526 acres and currently contains 206 Indian mounds. Fourteen miles of hiking trails run throughout the Monument. The visitor center contains a museum, changing displays, and an introductory film. For more information about the Monument, please visit our website at www.nps.gov/efmo, or call (563) 873-3491.